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NOTES ON PENOBSCOT HOUSES

By W. C. ORCHARD

DURING the past summer the writer, in the interest of the American Museum of Natural History, made a brief visit to the Penobscot Indians on Oldtown island, Maine, where some data were collected with reference to primitive architecture. Unfortunately, at the time of this visit a large majority of the Indians were away attending to their summer trade in fancy basketry and Indian curios at the various resorts; in consequence, the information could not be verified to the fullest extent. Several of the older men were questioned, and their statements furnished sufficient basis for the construction of models of a conical and a square bark shelter, a detailed description of which may prove of interest. Features of a third type of bark house were lightly touched upon, but the information was too vague to be of scientific value. It is hoped that at some time in the near future this matter may be taken up again.

The conical bark shelter (fig. 103) is built usually about ten feet high and ten feet in diameter; the framework consists of two sets of poles, one set inside and one outside. The inner poles support the bark and the outer help to hold it in position.

Nine poles, about twelve feet long and three and one-half or four inches in diameter at the larger end, are used for the inner frame. Four of these are tied together at a point about two feet from the tips, laid in pairs, one pair on top of the other. A rope of cedar bark, or a thong, bound around the poles twice and tied with a common knot, is employed to hold them together.

To erect the lodge, the four poles tied together are stood up and spread apart, as shown in figure 104. Nos. 1, 2, 3, and 4 are the poles fastened together; 5 and 6 are two poles placed between 1 and 2 to form door posts; 7, 8, and 9, placed between 1 and 3, 3 and 4, 4 and 2, complete the circle of foundation poles. A short pole is tied between 5 and 6, about six feet from the ground, form-

ing a lintel. A hoop of some flexible wood is fastened to the inner side of the poles, about seven or seven and one-half feet from the



FIG. 103. — Conical bark house of the Penobscot.

ground, to give additional strength, also to support sticks laid across, upon which clothing, etc., are placed to dry.

The covering consists of a number of pieces of birch-bark about three feet and one-half wide and as long as the diameter of the tree will afford. The pieces are lapped and sewed together with split spruce-root, forming long strips which are fitted around the poles. The width of the bark is about one-third the height of the lodge, consequently three tiers are necessary to complete the covering.

The two lower tiers are made in two sections each, to facilitate handling for transportation. One section suffices for the upper tier. The pieces of bark are so fitted and trimmed that all the seams are vertical. The covering of the poles is effected by commencing with a section of the lower tier at one of the door-posts. The end of the bark strip is turned around the pole and fastened by means of two

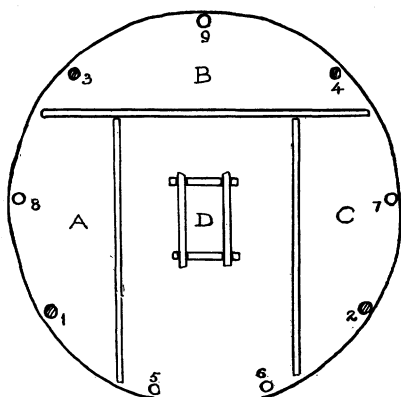


FIG. 104.—Plan of Penobscot dwelling.

or three strings of split spruce-root, passed through from the front, round the pole, and out to the front again and tied. The strip is then stretched around to the middle pole at the back (no. 9) and fastened through the top edge with a spruce-root string which is thrust through the bark, around the pole, and tied with a common knot. The string does not pass through the bark a second time, but is led back to the starting point over the edge. A similar fastening is made at each pole. The operation is repeated on the opposite side, with the end of the second section overlapping the end of the first at the back. The second tier is put on in the same way, the lower edge being allowed to overlap the first tier. The third or upper tier is started from the middle pole at the back, fastened through the upper edge, and is not turned around the pole as is done with the bark at the door-posts. The strip is carried around till the two ends overlap at the starting point, and a fastening is made at each pole, as with the lower tiers. To reach to the upper edge of this tier, any convenient article that is high enough and can be used to elevate the person building the house, is taken inside and the fasten-

ing completed there. Some of the width is taken up by the longitudinal lapping, which leaves sufficient opening between the top edge of the bark and the intersection of the poles for a smoke-hole.

The outside poles, cut about ten feet long, are then put in position, one opposite each pole inside. They are secured by sharpening the lower ends and driving them into the ground a few inches, and by tying the upper ends to the corresponding poles inside, just above the edge of the top tier of bark.

A door is made of a tanned moose-hide, laced to two poles, one at the upper and one at the lower end, the upper end being tied through the bark to the lintel. In rainy or windy weather, the lower end is fastened by means of a thong, or a cedar-bark rope, to the nearest pole to the door opening, or to small stakes driven into the ground close to the wall of the tent.

The door of the lodge faces toward the south or west, according to the surroundings.

The interior furnishings consist of beds for sleeping or lounging, and a fireplace. The beds are made of boughs of spruce or fir, or of any accessible soft boughs, covered with tanned skins kept in place by poles laid along the spaces allotted for that purpose on the ground. The space marked *A* is usually occupied by the owner; *B* is the place of honor, and *C* is assigned for ordinary guests. *D*, the fireplace, consists of four logs, two of which are about two feet long and the others about fifteen inches. The short logs are laid across the rectangular space formed by the poles, which keep the bedding material within bounds; the longer ones are laid lengthwise of the space and on top of the shorter poles, forming a framework which keeps the fire from scattering. The cooking-pots are suspended over the fire by means of two forked sticks, one driven into the ground at each end of the fireplace. Resting in the forks, a cross stick supports the pot-hangers, which are made from a twisted withe with a loop at one end to slide along the cross stick, while at the opposite end there is a crotch in which the pots are hung. A stone fireplace built outside of the wigwam for use in hot weather consists of a rectangular space enclosed on three sides by a stone wall about two feet high. The approximate size of the enclosure is four feet by eighteen inches, one long side of the space being left

open. The pots and kettles are suspended in the same manner as those inside the wigwam.

For more permanent use than the circular lodge, and also for better protection from the cold in winter, a square wigwam was erected (fig. 105). The lower part of such a structure consisted of four or five

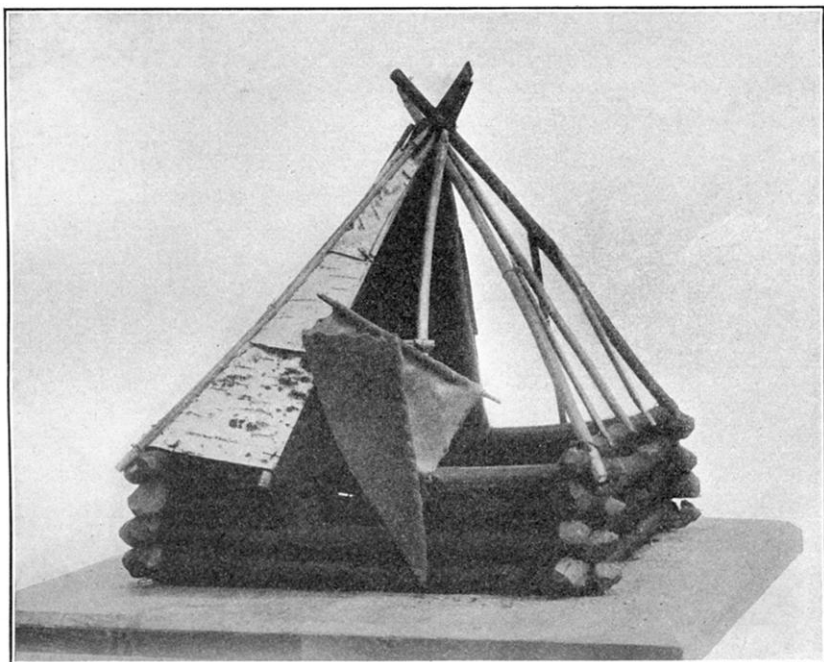


FIG. 105. — Square house of the Penobscot.

tiers of logs, built up in the usual method employed for log cabins, the upper part consisting of a roof of birch-bark supported by poles. The minimum size of the wigwam was ten feet square and ten feet high at the apex, and larger according to the number of persons to be accommodated.

The log structure was built from three to four feet high, and on the side facing the warmest quarter, sections of two or three of the upper logs were cut out to make an opening for the door, from two and a half to three feet wide, the lower logs being left entire to keep snow from drifting in. The roof consisted of four main poles about

twelve feet long, tied together in the same manner as the poles for a circular lodge. The poles were spread apart, one being brought to each corner of the log structure, notched into the intersections, and tied with spruce-root or cedar-bark cords.

At the opening left for the door, two poles were notched into the ends of the logs and carried up to the point where the main poles crossed, with a short pole for a lintel tied across, about six feet from the ground. The three remaining sides were filled in with poles, one from the center of the log to the apex, and the spaces on either side with shorter poles, at right angles to the logs, reaching to the main pole and tied at that point with spruce-root or cedar-bark cord. The birch-bark covering was fitted and laid on in tiers, the upper overlapping the lower, and tied to the supporting poles in the manner described for the circular lodge. Outside poles were used to hold the bark more securely.

The arrangement of bedding and the fireplace also corresponded with that of the circular lodge.

The crevices between the logs and between the bark and the top of the log structure were packed tightly with moss, to keep out the cold winds, and for further protection from cold the walls were banked outside with moss and leaves, covered with earth. The usual moose-hide door and method of fastening were employed.

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NEW YORK CITY